

perform the duty of two distinct lamps, at the cost of one. The City Council intend to light the public streets and thoroughfares of Melbourne with about 2,000 lamps, 1,000 of which are intended to be fixed first at average distances of say seventy yards, leaving space for the introduction of 1,000 more subsequently, without altering those already fixed. This is a better arrangement than to light half the city first, and cannot fail to give satisfaction, as it provides for a general diffusion of light amongst those who are taxed to pay for it, rather than the monopoly by one part of the city at the expense of the other. The other public purposes that gas is generally applied to are the lighting of churches, chapels, &c., &c.; one of great utility, namely, that of illuminating dials of steeple and other clocks, thus allowing to be seen

“ How steals the march of time away,
By night as well as broad noon day.”

(To be continued.)

XI.

PHONETICS.

BY W. CLARSON, ESQ.

MR. CHAIRMAN AND GENTLEMEN.—The paper I have to read before you this evening is upon the phonetic repre-

sentation of language, as developed in phonography, or writing by sound; and phonotypy, or printing by sound.

On introducing this subject to the notice of the members of the Victorian Institute, I can but wish some person had the task better able to do justice to its simple yet philosophic beauty. My chief object is, that any who may feel desirous of paying attention to the matter, may have an opportunity of doing so; that a section be formed for such purpose, and thus one of the primary objects in the establishment of this Institute be brought to bear.

My observations will necessarily be brief, and of a fragmentary character; and doubtless, those here who understand the subject, will feel that much, very much, more might have been said in favour of the system. Still, I hope to make all tolerably well acquainted with the principle upon which it is proposed to reform our orthography, and perhaps excite the interest or curiosity of some to know more of it.

Phonographers have no new tale to relate. They must still reiterate the tale of their fellows for the last seventeen years; and, indeed, what hosts of great and good men before them have laboured to lay before the world. The same inconsistencies and absurdities in our orthography are manifest, and the want of some more efficient mode of communicating thought to paper is increasingly felt.

We live in an age, the chief characteristics of which, is the universal desire for advancement. Satisfied with nothing, man in his search after truth, leaves no stone unturned while a chance of discovery remains. Yet, though we live and rejoice in the light of modern science; though our hearts are warmed within us, as by means of correspondence and books, we commune with the distant loved one and the mighty dead, with pain we are reminded that in the land of our birth, England, social, joyous England, there are millions who have not this light; who are shut out by the circumstances of their birth, or the condition of society, from the chief blessing of civilized life—power to read and write.

We learn from the reports furnished by the Registrar-General, that ten out of every thirty-two men, and ten out of every twenty-two women; or, dropping the inconsiderable fraction, one man in three, and one woman in two, throughout the country are unable to write their names; we, moreover, learn that five of the sixteen millions of people in England and Wales cannot read! This is a startling fact, and any system which professes to be a remedy for an evil of such magnitude, assuredly demands the calm consideration of every man who is a lover of human progress.

Why is England thus o'ershadowed by a cloud of ignorance after the grand efforts made to educate the people during the last century? How is it, that with the united efforts of the Sunday, National, British and Foreign, and other School Societies, so little has been accomplished, considering the vast field open for their labours? We answer, it is because "it is impossible for any one to read till he has charged his memory with the pronunciation of at least ten thousand words, and has so accustomed himself to the look of each, that he can at any time recall its proper sound in spite of its spelling, which would lead him to pronounce it in some other way; and because no one can write till he has committed to memory the orthography of at least ten thousand words, so that he can at any time recall the several letters he must write for each word, in spite of the sound of such word, which would lead him to spell it in some other way!" Am I asked for proof of this assertion? It is found in every sentence of English which is spoken, written, or printed.

I would not be thought to consider the mere power to read and write, education. Far from it. A person who can read I imagine, has no greater claim to be considered educated, than one who can draw a chalk line has to be considered an artist. Reading and writing are the means of education. They are, in fact, artificial modes of hearing and speaking. It is absurd that the attainment of mere reading, the power

to hear, as it were, the instruction of books, should require years of application, consuming valuable time, which properly, should be spent in the acquisition of useful knowledge; yet, so great is the difficulty of acquiring reading, that not a sixth part of the children that attend our public schools acquire the ability to read with ease and correctness; and probably one-half leave school and are absorbed into the labouring community of the country, not being able to read at all. It is indeed a pure farce to vote for national education, while the power to read and write is unattainable, as is the case with the majority, in the period they are able to command for school education.

All the difficulties experienced in learning to read, is due to the absurd and lawless use of letters in the spelling of words, for, in only one word in a thousand, do the letters point out the true pronunciation, consequently there is no way of mastering the art of reading on the usual plan, but by getting "off by heart" the thousands of words comprised in the English language.

The following graphic *exposé* of the absurdities of English orthography is from the pen of Hart, a writer of the sixteenth century, a forerunner of the present orthographic reform, who excited no little merriment in his day for offering a remedy for the evil. There are some people, in the present day, who laugh at phonetic spelling, but it is from ignorance, or an aversion to any thing in the shape of reform, and they generally fail to enlist the sympathies of thoughtful men.

"And now, the better to call to remembrance the principal parts and effect of that which hath been said, I will use this allegory, and compare the lively body of our pronunciation, which reason biddeth the writer to paint and counterfeit with letters, unto a man which would command an indiscreet painter to portray his figure, as thus; naming the man *Æsop*; who, coming to a painter, saith,—'Friend, I would have thee to counterfeit the quantity and quality of my body and apparel, by thy craft; so lively as those men which have even now seen me, may know (whensoever they may see it hereafter,) that the same is made to repre-

sent me unto them, as I now am.' The painter answereth,—' Sir, stand you there, and I shall do it as I used to do others, and as all the painters of this country are accustomed to do.' *Æsop*: 'How is that?' The painter answereth,—' Though you wear hose and shoes, your figure shall need none. But it shall therefore have painted other apparel, by a third more than you wear; and upon every several piece I mark and write the country's name whence it came. And because your clothes, as well the cloth as the fur and silk, are of one colour, I will make them to be better seen, of divers colours. I will also write on your forehead your father's and mother's name, that men may see of what stock you are come. Whereas in some countries painters do use to make the nose of like quantity to that in the body, we set others at the ends of them. And for making the littleness of the eyes, we make the compass of the head greater than the natural, and double the eyebrows. Then, in the place of ears, we do use to paint eyes. And last of all, I will change the middle fingers and thumbs to others' places.'

1. Diminution.

2. Superfluity for Derivation.

Difference.

Etymology.

Length of vowels.

For shortness of Vowels use Double Consonants.

3. Usurpation of power.

4. Misplacing.

The Painter: 'How like you this? Will it not do well?' *Æsop*: 'Yes; but I would fain know for what purpose, and the reason wherefore you would do this.' *The Painter*: 'Because the painters of this country, for time out of mind, have used the like, and we continue therein; and because it is so commonly received as it is, no man needeth to correct it.' A good answer. Now leave we them, and I demand the maintainers of such painters of our pronunciation, if they had forty or more of such portraitures drawn, shaped, and coloured, of their afore-said friend; and those same set upon the pillars of Paul's Church, who should be able to know (but they themselves, being daily used in naming them,) which should be for the one, and which for the other. For they should not half so well represent them as should the well-proportioned figures of so many skipping babians, apes, marmoset or monkeys, and dancing dogs or bears."

Hart's ludicrous illustration of the portraiture of spoken languages in the sixteenth century is true in the last particular of our present representation; indeed, its state is far worse now than then, and every year its tendency to the hieroglyphic type is more apparent.

It may be well to examine for a moment the principal causes which have brought about this unsatisfactory state; it will be necessary briefly to run through the history of the art of transmitting the symbols of ideas, as well as the progress made in the art of perfecting those symbols.

In the earliest ages, when the requirements of man were comparatively few, the swiftest runners were selected to convey a message; fire signals were also used for many centuries; subsequently the rocket system, and more recently still, the semaphore; last, and greater than all, the electric telegraph. In the former contrivances the signification had to be pre-determined, and only thus far could they be made available; but with the electric telegraph no pre-arrangement is necessary; indeed, we are quite justified in thinking, that in this, at least, we have attained perfection. Certainly, we cannot conceive a quicker mode, and it is admirably free from the incumbrances which attended all former contrivances. How vast, then, have been the improvements made in the art of transmitting symbols of ideas—from the courier to the electric current!

Let us now glance for a moment at what has been done towards improving the symbols themselves.

There can be no doubt that in the remotest times the representation of language was hieroglyphic, that is, it was composed of a series of thought pictures, or, as it were, portraits of ideas. A sign was required for every distinct idea. As men thought more and portrayed their thoughts, so these symbols increased, until they became too numerous for the memory to retain.

It is impossible to give the exact date of the invention of the alphabetic system of writing; but we learn from history that the Egyptian priests knew both the hieroglyphic and alphabetic modes; and moreover, we learn that they kept the secrets of their caste and creed in the former because of the great difficulty of acquiring and retaining it in memory.

Nevertheless, the introduction of alphabetic writing forms no insignificant era in the world's history. The inventor happily subjected language to a careful analysis, and found it to consist of simple vocal sounds, which, though admitting of infinite combination, were, in their radical elements, surprisingly few. This discovery formed the basis of his system. These vocal utterances required only representative forms, which he doubtless selected from the numerous figures or thought-pictures he had been accustomed to write. Of course, the simplicity of the sign could not then be any object; it was sufficient that it suited admirably the requirements of the age—perfection was not to be expected.

The Phœnicians, Hellenes, and Egyptians, all used the same characters. The Greeks obtained their alphabet from the Phœnicians. The Latins adopted theirs from the Greeks. The northern conquerors of Rome took as spoil the letters of the vanquished, and, with but trifling alteration, adapted them to represent their numerous tongues. Thus, any original errors which there may have been were transmitted from nation to nation, and from generation to generation; and numerous are the defects from omissions and alterations.

The result is before us; modern English is considerably less scientific—less true to the alphabetic theory upon which it is professedly based than the ancient Phœnician.

Great as has been the progress made in the art of transmitting symbols of ideas, we cannot but note a retrograde movement in the perfecting of the symbols themselves.

Various schemes and systems have been proposed whereby to arrest the backward tendency; but they have fell far short of the mark, from their want of scientific basis.

The inventor of phonography happily reverted to the original idea of the inventor of alphabetic writing. He sought the elementary sounds and gave to them appropriate representatives. Thus its foundation is eminently scientific and simple. The phonetic alphabet contains as many marks

or signs as there are elementary sounds in the English language. In this it varies from the old Latin or Romanic alphabet hitherto used, which provides no signs for many sounds, and the letters it contains are not always used to represent the same sounds.

It will be observed that nearly all the letters of the Phonetic alphabet are arranged in pairs, one letter of each pair being represented by a light sign, the other by a corresponding heavy one. The difference between the two letters of each pair of vowels is in length or duration. There are six pure vowels,—*e, a, ah, au, o, oo*, with their light sounds, as in *fit, met, bat, not, nut, and foot*. Of these all other sounds in the English are compounded.—(See *Plate.*)

The difference in the letters forming each pair of consonants is, that the first is a thin or light articulation, and the second a thick or heavy one. These letters are consistently represented by thin and thick dots and strokes. Many persons, who are not acquainted with phonography, think that light and heavy strokes are not easily made in rapid writing; but the experience of thousands of persons, many of whom have written the system for years, proves that the slight difference necessary to distinguish the one from the other, is made without any perceptible effort, the heavy strokes being traced by the hand with as much facility as their corresponding heavy sounds are produced by the various organs of speech.

Such then is the Phonetic alphabet, such is the alphabet of nature, which, we believe, sooner or later, men will see necessary to adopt. The years of toil spent in teaching and acquiring the art of reading would be lessened to a few weeks, and there would be no longer a danger, as there now is, of creating a distaste and positive aversion to study. That which is now a severe task would become a source of imperishable pleasure.

In conclusion, Mr. Chairman and Gentlemen, I would remark that there are many points of interest which should

have been noticed, but which were beyond the limits of a paper of this description. It is sufficient that the system harmonises in all its parts, and from whatever point of view, it presents simplicity as its beauty, and commends itself to our notice by its beautiful adaptation to our wants. I would call particular attention to the general truths laid down in this paper, for beyond them there is but little difficulty.

Every portion of the system is so reduced to certain and easily understood principles, that the perception of one part necessarily leads to the attainment of the rest. I shall be happy to furnish any information I am able, and should any member wish to obtain works treating of phonetics, I shall be pleased to lend any I have in my possession.

XII.

ON THE TIMBER OF THE COLONY.

BY GEORGE HOLMES, ESQ.

READ MAY 3, 1855.

IN the greater portion of the habitable world timber is the most valuable part of the vegetable creation; the inexhaustible supply of wood in almost every country has been made use of by mankind from the earliest period of his existence.